Name: _____ Date: _____

HW: Graphing QFs; Parabolic Word Problem

1. Graph the quadratic function on the coordinate plane. Provide all of the requested information. BE SURE TO DASH YOUR LINE OF SYMMETRY AND NAME YOUR function.

$y = 2x^2 + 4x + 10$

(*Use* $x = \frac{-b}{2a}$ **)**

axis of symmetry: _____

vertex: (_____, _____)

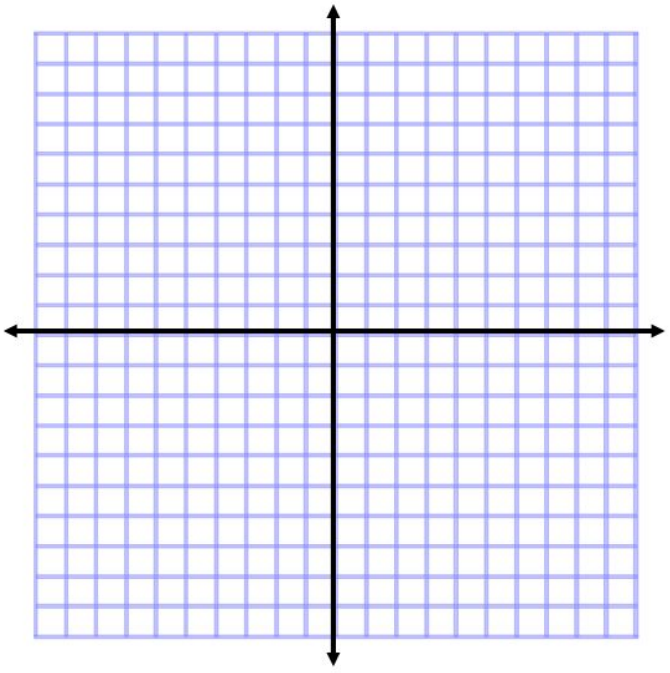
point #1: (_____, _____)

reflection of point #1: (_____, _____)

point #2: (_____, _____)

reflection of point #2: (_____, _____)

Show your work:



TURN OVER!

2. Miniya throws a softball from an initial height of four feet with an initial velocity of sixty-four feet per second.

a. Substitute the values from this situation into the equation: $h = -16t^2 + vt + c$.
b. After how many seconds will the softball reach maximum height?
c. What will the maximum height be?